

IN THE SPECIFICATION:

Please REPLACE the paragraph beginning at page 1, line 10, with the following paragraph:

There is a conventionally ~~new~~ known method in which a 3-D model of a robot is rendered on a screen, the rendered 3-D model of the robot is caused to move in animation based on a motion program inputted to the robot, and the motion by the teach program is checked and adjusted.

Please REPLACE the paragraph beginning at page 8, line 24, with the following paragraph:

For example, it is assumed that for an object 3-D model 30 shown in Fig. 9, an origin of coordinate systems is set at the apex P1, and the direction advancing from the apex P1 to the apex P4 is Y axis plus direction, the direction advancing from the apex P1 to the apex P2 is X axis plus direction, and the direction advancing from the apex P1 to the apex P5 is Z axis minus direction. Further, it is assumed that the shape of the object 3-D model 30 can change but ~~it~~ its shape change is limited to only X and Y axes direction, not changing in Z axis direction. For this 3-D model 30, dimension lines are defined for edge lines which can change its length. Fig. 9 shows an example in which four dimension lines are defined between the apexes P2 and P3, between the apexes P1 and P2, between the apexes P4 and P11, and between the apexes P11 and P9.

Please REPLACE the paragraph beginning at page 14, line 14, with the following paragraph:

In the above formula, "checkifgtops" is a code of the coordinate check, and the latter portion "2, 0, 1, 0" indicates that in the case where the value of the X axis coordinate of the apex P2 is greater than the value of the X axis coordinate of the apex P1, it is determined that the coordinate is fulfilled and in other case, it is not determined ~~so~~ so.

Please REPLACE the paragraph beginning at page 18, line 10, with the following

paragraph:

In Fig. 9, a reference numeral 30 represents a shape of a selected object 3-D model, and a reference numeral 31 represents numeral value inputting columns which can change the shape or dimension of the displayed object 3-D model. Although Fig. 3 ~~illustrate~~illustrates the symbols of the apexes "P1" to "P12", these symbols are not displayed on the screen in practice. However, the data of these apexes P1 to P12 is stored as an object library. In the dimension numeral value inputting column 31, displayed are lengths of dimension lines, or lengths of the distance between apexes, obtained from the shape of the object created when the object library was formed.

Please REPLACE the paragraph beginning at page 21, line 11, with the following paragraph:

Fig. 10 shows one example of the plan view of the layout of the work cell, showing-a plan views of the layout of the robot, table, workpiece and the like when the robot carries out the arc welding. Such a plan view is read and displayed on the display means 14b.

Please REPLACE the paragraph beginning at page 21, line 22, with the following paragraph:

Next, the operator inputs the object definition command when defining the object on the plan view, while the operator inputs an object arranging command when arranging the 3-D model which had ~~bee-been~~ read from the object library and of which dimension has been ~~adjusted~~adjusted (step C3).

Please REPLACE the paragraph beginning at page 22, line 18, with the following paragraph:

When arrangement of the 3-D models of the objects in the work cell is completed, the procedure returns to Fig. 3, and shape changing processing for the object 3-D model is carried out based on information from outside (step ~~C7~~B7).

Please REPLACE the paragraph beginning at page 24, line 18, with the following

paragraph:

In the case of the method shown in Fig. 7 which uses a vision sensor, a position and a posture of the object are obtained by the vision sensor, and the obtained position and the posture are transmitted to the graphic display apparatus 1 (steps F1 and F2). The graphic display apparatus 1 obtains a relative position of the object with respect to the robot based on the received position and the posture (step F3), and ~~change~~ changes the layout of the object 3-D model on the display screen based on the relative position obtained in this manner (step ~~E4~~ F4).